STATE OF MISSOURI

# DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

# MISSOURI STATE OPERATING PERMIT

General Operating Permit

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. MO-G010000

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

## FACILITY DESCRIPTION

All Outfalls - Concentrated Animal Feeding Operation (CAFO)
Process wastes are collected and reused as fertilizer by spreading onto agricultural fields at agricultural rates. There is no-discharge except during storms exceeding the design storm event.

A detailed operation description is attached based on the permit application submitted for this facility.

This permit authorizes only wastewater, including storm waters, discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

February 24, 2006
Effective Date

Doyle Childers, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

February 23, 2011
Expiration Date

Edward Galbraith, Director of Staff, Clean Water Commission

APPLICABILITY

1. This permit applies to point source discharges from concentrated animal feeding operations (CAFOs). The operations that may be covered by this general permit are those having a design capacity less than 7,000 animal units (7,000 beef; 17,500 swine; 4,900 dairy; 210,000 laying hens).

2. Certain CAFOs are required to have a permit in accordance with National Pollutant Discharge Elimination System (NPDES) regulations under 40 CFR 122.23 and 122.26, and Missouri regulations under 10 CSR 20-6.010, 6.200, and 6.300.

3. If at any time the owner of the operation should desire to apply for a site-specific individual state operating (NPDES) permit, the owner may do so.

4. This permit applies only to requirements under the Missouri Clean Water Law and Federal Clean Water Act and regulations and does not apply to other environmental laws and regulations.

5. This permit does not supersede nor remove liability for compliance with county and other local ordinances.

6. If at any time, the Missouri Department of Natural Resources determines the quality of waters of the state may be better protected by requiring the owner of the operation to apply for a site-specific individual state operating (NPDES) permit, the department may do so.

EXEMPTIONS

1. A permit is not required for non-point sources.

2. A permit is not required for Class II or smaller operations unless the operation discharges to waters of the state or is otherwise required to have a permit under 10 CSR 20-6.300.

3. A permit is not required for the land application of process wastes that are licensed under the Missouri Fertilizer Law, Chapter 266 RSMo and regulations under 10 CSR-250.

GENERAL REQUIREMENTS

1. Definitions are as listed in the attached Best Management Practices and in the State regulations under 10 CSR 20 Chapters 2 and 6.

2. a. This permit authorizes operation of the system design capacity or equivalent animal units described in the attached Detailed Operation Description and in the permit application and associated engineering plans. Engineering plans must be certified by the Natural Resource Conservation Service, University of Missouri Extension Service or private registered professional engineer. The system design and operation may be modified upon approval by the department.

   b. The producer may change animal numbers and weights as long as the overall waste load of the current permit is not exceeded; notification shall be provided to the department within 30 days after the change is completed.

GENERAL REQUIREMENTS (continued)

3. A construction permit is required prior to the installation or modification of the waste handling facilities or expansion of the animal feeding operations in accordance with 10 CSR 20-6.300.

4. CAFOs that were issued a Letter of Approval (LOA) for operation may apply to transfer to the general permit. Design information for the LOA may be incorporated by reference into the general permit application.

5. The permittee is responsible for all land application sites that are owned, leased, or otherwise controlled by the permittee including land used under agreements with other landowners.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee shall not allow a discharge to waters of the state except during storms exceeding the design storm event. See Best Management Practices for a list of design storms.

2. Any discharge from this operation shall not cause a violation of the state water quality standards for either general or specific criteria under 10 CSR 20-7.031.

3. Monitoring requirements consist of flow estimates of any discharge that occurs to waters of the state and operational monitoring of the land application system. See Section A of this permit for detailed monitoring requirements.

4. Rainfall records must include daily precipitation amounts.

5. The permittee shall keep records of all bulk sales and give-away of process wastes including quantity and name of the person receiving the material. A copy of the Best Management Practices shall be provided to persons receiving the process wastes. The receiver is then responsible for the proper handling of the material.

## A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

| OUTFALL NUMBER AND EFFLUENT PARAMETER(S) | UNITS | FINAL EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
|---|---|---|---|---|---|---|
| | | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| **Process Wastewater – Discharge Monitoring** (Notes 1 and 2) | | | | | | |
| Discharge flow | CFS** | *** | | *** | daily*** | estimate** |
| **Land Application System – Operational Monitoring** (Note 3) | | | | | | |
| Lagoon or Storage Structure Level | feet**** | ***** | | | once/month | measured |
| Land Application Period | hours | ***** | | | daily | total |
| Amount Land Applied | gallons or cubic feet | ***** | | | daily | total |
| Application Area | acres | ***** | | | daily | total |
| Application Rate | amount/ acre | ***** | | | daily | total |
| Rainfall | inches | * | | | daily | total |

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE see reporting requirements on following page. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

**B. STANDARD CONDITIONS**

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED BMP & Part I STANDARD CONDITIONS DATED October 27, 2005 & October 1, 1980, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

* Monitoring requirement only.

** Report flow as cubic feet per second (CFS) based on an instantaneous estimate of the flow at the time of sampling. CFS = flow width in feet x flow depth in feet x flow velocity in feet per second. Estimates of stream channel width and depth may be used and flow velocity can be measured by timing how many feet a floating object moves within a one-second interval. Small flows may also be estimated based on gallons per minute (GPM) measurement using a container and stop watch; 450 gpm = 1.0 CFS. Other similar means of estimating may also be used.

*** Monitor only when a process wastewater discharge occurs to waters of the state. Monitor the discharge at the point immediately prior to the receiving stream or at the property boundary, whichever occurs first.

**** Report the liquid level as feet below the emergency overflow level.

***** Monitor during land application and follow the attached Best Management Practices.

Note 1 - There shall be no-discharge of process wastewater during dry weather conditions. For a properly operated system, discharge is allowed due to overflow through the emergency spillway of the lagoon or uncovered storage structure that is caused by storm events that exceed the design storm. Only that portion of storm water flow, which exceeds the design storm event may be discharged. Process wastewater discharge is not allowed by pumping, siphoning, cutting of berms, or by any other method, except as authorized herein, unless prior approval is obtained from the department.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

Note 2 - Discharges shall be reported to the department within 24 hours.

Note 3 - Maintain records and submit with annual report. See "Reporting Requirements" section. Rainfall records from the nearest weather service office may be used if the permittee does not record rainfall on-site.

REPORTING REQUIREMENTS

An annual report shall be submitted by the 28th day of January for the previous calendar year. The first report is due on the next annual report date after permit issuance including partial report periods. The report shall include a copy of the monitoring results and other records required by this permit. Report as no-discharge, if a discharge did not occur during any of the monitoring periods. Use the permit monitoring report form provided by the department or equivalent.

TERMINATION OF PERMIT

If activities covered by this permit have ceased, the operation has been closed in accordance with the regulations and this permit is no longer applicable, the permittee shall request termination of this permit. The permittee shall submit Form H, Termination of a General Permit.

BEST MANAGEMENT PRACTICES

The permittee shall follow the attached Best Management Practices (BMP) for CAFOs, which are hereby incorporated as though fully set forth herein. Exceptions for BMPs may be approved on a case-by-case basis by the permitting authority.

DETAILED OPERATION DESCRIPTION

The construction and operating permit applications are hereby incorporated as though fully set forth herein. The department shall also prepare a detailed operation description based on the review of each general permit application. This description will serve as a summary of the design parameters that are approved for each operation and are hereby incorporated as though fully set forth herein. At a minimum, the information on the attached form will be used.

REOPENER CLAUSE

This permit may be reopened and modified, or alternatively revoked and reissued, to:

(a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
    (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
    (2) controls any pollutant not limited in the permit.
(b) Incorporate new or modified State of Missouri Statutes or Regulations.
(c) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
(d) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

**DETAILED OPERATION DESCRIPTION**
**For Concentrated Animal Feeding Operations**
**General Permit**

Operation Name: Class:

DESIGN APPROVED FOR THIS OPERATION

Type and Number of Animals:
Animal Units:
Total Design Flow (gpd):
Land Application Acres:
Owned: Under Spreading Agreement: Total:
Land Application Equipment:
Mortality Management:

**Feature #xxx:**
Feature Description:
Legal Description:
Lat/Long:
First Classified Stream and ID:
USGS Basin & Sub-Watershed No:
Type and Number of Animals:
Animal Units:
Storage Structure Type:
Storage structure size (at overflow level) -
Surface Area (sq. ft.): Total Depth (ft.): Total Storage Capacity (gal.):
Storage structure operating levels -
Upper operating level: (feet below emergency spillway)
Lower operating level: (feet below emergency spillway)
Area draining into storage basin (acres):
Design Storage (days) - Average Year: 1 in 10 Year:
Wastewater Volume (gal/yr.) - Average Year: 1 in 10 Year:
Design Storm Volume (cu. ft.) -
1 in 25 yr 24 hr storm: 1 in 10 yr 365 day: 1 in 10 yr 10 day:
Biosolids Volume (tons/yr.):

| | Land Area | Nitrogen | Avg. Year | 1 in 10 Year |
|---|---|---|---|---|
| Wastewater Application Rates: | (acres) | (lb./acre/yr.) | (in.) | (in.) |
| Conservative [1] | | | | |
| Plant Available Nitrogen [2] | ** | ** | ** | ** |
| Biosolids Application Rates: | (acres) | (lb./acre/yr.) | (tons/acre) | (tons/acre) |
| Conservative [1] | | | | |
| Plant Available Nitrogen [2] | ** | ** | ** | ** |

**Design Storm Events (in.) :**
1 in 25 yr. 24 hr.: 1 in 10 yr. 10 day: 1 in 10 yr. 365 day: 1 in 10 yr. Rain-Evap:

**Additional Operational Description:**

[1] The application rate for Conservative Management approach is an estimate based on industry averages for nitrogen content for small sized livestock operations as reported by Manual 121 published in 1989. Actual nitrogen content for any individual operation may vary significantly from the estimated value.

[2] The Plant Available Nitrogen (PAN) approach is required if application rates will exceed the conservative approach or if supplemental commercial fertilizer will be applied to these sites during the same cropping year as manure applications. The actual manure volume and nitrogen application rates should be adjusted for each application period based on: (a) the hydraulic capacity of the soil, (b) nitrogen fertilizer requirements of crops to be grown, and (c) current nutrient testing results for soils and applied wastes. Nitrogen availability factors for the PAN method shall be in accordance with Livestock Waste Facilities Handbook, Midwest Plan Service publication MWPS-18, April 1993; Agricultural Waste Management Field Handbook, USDA Natural Resource Conservation Service (NRCS), April 1992 and subsequent supplements; and Plant Available Nitrogen Procedure, Missouri Department of Natural Resources, Water Pollution Control Program, December, 2005. A copy of PAN worksheets, testing results and crop information must be submitted with the annual report.